



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,580	08/24/2001	Roger Vinas	60004033-3	3619

7590 04/17/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

POON, KING Y

ART UNIT	PAPER NUMBER
----------	--------------

2625

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,580

Applicant(s)

VINAS ET AL.

Examiner

King Y. Poon

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/11/2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 28, 37, 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 28, 37, 42: The limitations of "wherein configuring the test pattern to include as many elements as will fit per row comprises: configuring differently sized print media to include different numbers of elements per row, wherein for each size of print media, each row is filled before another row is started" is subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The examiner does not find support, in the specification, to show that configuring a test pattern involves configuring different sized print media such that the elements of the test pattern is being printed onto print media of different size.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 25-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 25, 33, 39: Since, mathematically, any number can be divided by any other number no matter how large the other number is (except the other number is 0); theoretically, it is always possible to have any number of elements to fit in a row of print medium. Therefore, it is unclear what the claim mean by "as many elements as will fit per row" "elements beyond which will fit in a row on a print medium."

Regarding claims 28, 37, 42: It is unclear which row of the test pattern of claim 25, 33, 39 is being printed on which print media. It is also unclear "another row is started" is referring to start at which print media.

Regarding claims 30, 38, 43, 44: Since, mathematically, any number can be divided by any other number no matter how large the other number is (except the other number is 0); theoretically, it is always possible to have any number of elements to fit in a row of print medium. Therefore, maximize width and minimize height is possible only by printing one row of test pattern. It is unclear what claims 30, 43, 44 means when claims 25, 33, 39 claiming printing the test pattern on more than one row.

Claims 26, 27, 29, 31, 32, 34-36, 40, 41 are rejected under U.S.C. 112, second paragraph because they depend on rejected claims 25, 33, 39.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 25-27, 29-36, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al (US 6,975,418) in view of Ichikawa (US 5,729,555).

Regarding claim 25: Ohta teaches a processor implemented method for printing a test pattern (1202, 1203, etc, fig. 3), comprising: configuring the test pattern to include as many elements as will fit per row (fig. 3, shows that the test pattern is configured to have eight color element to be fit in a row; also see note), wherein height of the test pattern is increased (increase to 4 rows height, fig. 3) in response to availability of

elements beyond which will fit in a row on a print medium; and printing the test pattern on the print medium (1201, fig. 3).

Ohta does not teach determining a size of a print medium upon which the test pattern is to be printed.

Ichikawa, in the same area of printing test pattern, teaches determining a size of a print medium upon which the test pattern is to be printed (1102, fig. 11).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta to include: determining a size of a print medium upon which the test pattern is to be printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta by the teaching of Ichikawa because it would have allowed the printed test pattern matching the paper sized as taught by Ichikawa, column 6, lines 25-30.

Note: Since, mathematically, any number can be divided by any other number no matter how large the other number is (except the other number is 0); theoretically, it is always possible to have any number of elements to fit in a row of print medium. For claim interpretation purpose, "configuring the test pattern to include as many elements as will fit per row" is being interpreted as the test pattern is being configured to have X number of element being fit in a row. If the processor decided to print only cyan element in the first row, cyan is the only color that will be fit into the first row and any other color would be considered as not fit in the first row because the processor would not allow the other color to be printed in the first row.

Regarding claim 26: Ohta teaches configuring each row of the test pattern to include as many color ramps as will fit on a row, up to a number of color ramps to be printed (one color ramp per row, fig. 3).

Regarding claim 27: Ohta teaches configuring the test pattern to include a second row only when space does not exist on a first row to add an additional element (note, the element of claim 25 can be interpreted as a color ramp; from fig. 3, row 1202 has no space to fit row 1203).

Regarding claim 29: Ichikawa teaches configuring the element to be printed according to a size of each of the elements (column 6, lines 25-30).

Note: the element of claim 25 can be interpreted as a color ramp.

Such teaching would ensure the test pattern of Ohta would be printed within the print medium.

Regarding claim 30: Ichikawa teaches configuring the test pattern to maximized the width of the text pattern and minimize height of the test pattern (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size, thereby minimizing paper expenditure by scaling the test pattern to fit the size of each paper. It will not print the pattern on extra sheets because the pattern is scaled to fit the page).

Such teaching would ensure the test pattern of Ohta would be printed within the print medium as well as reducing space.

Regarding claim 31: Ichikawa teaches configuring the test pattern comprises: adjusting a relative position of elements between locating the elements on a same row

Art Unit: 2625

and locating the elements on two different rows, based upon size of the elements and space available in the same row (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size).

Such teaching would ensure the test pattern of Ohta would be printed within the print medium.

Regarding claim 32: Ichikawa teaches wherein as many elements as will fit per row is based on a size of the element and a width of the print medium (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size).

Note: Since any number can be divided by any other number no matter how large the other number is (except the other number is 0), theoretically, it is always possible to have any number of elements to fit in a row of print medium.

Regarding claim 33: Ohta teaches a processor implemented method for printing a test pattern (1202, 1203, etc, fig. 3), comprising: configuring the test pattern to include as many elements as will fit per row (fig. 3, shows that the test pattern is configured to have eight color element to be fit in a row; also see note), wherein the configuration moves an element which will not fit on a first row into a second row wherein the moved element will fit in its entirety (fig. 3); and printing the test pattern on the print medium (1201, fig. 3).

Ohta does not teach determining a size of a print medium upon which the test pattern is to be printed.

Ichikawa, in the same area of printing test pattern, teaches determining a size of a print medium upon which the test pattern is to be printed (1102, fig. 11), and change the size of the print element to fit into the print medium.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta to include: determining a size of a print medium upon which the test pattern is to be printed and change the size of the print element to fit into the print medium.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta by the teaching of Ichikawa because it would have allowed the printed test pattern matching the paper sized as taught by Ichikawa, column 6, lines 25-30.

Note: Since, mathematically, any number can be divided by any other number no matter how large the other number is (except the other number is 0); theoretically, it is always possible to have any number of elements to fit in a row of print medium. For claim interpretation purpose, "configuring the test pattern to include as many elements as will fit per row" is being interpreted as the test pattern is being configured to have X number of element being fit in a row. If the processor decided to print only cyan element in the first row, cyan is the only color that will be fit into the first row and any other color would be considered as not fit in the first row because the processor would not allow the other color to be printed in the first row.

After the modification, Ohta teaches to change the size of the print element to fit into the print medium. As previously pointed out, theoretically it is always possible to

have any number of elements to fit in a row of print medium-especially the size of print medium can be changed.

Regarding claim 34: Ohta teaches, wherein the method additionally comprises; increasing height of the test pattern only in response to availability of elements which will not fit on a row (fig. 3, magenta that is not going to be printed with cyan (not fit) is printed on a second row).

Regarding claim 35: Ohta teaches configuring each row of the test pattern to include as many color ramps as will fit on a row, up to a number of color ramps to be printed (one color ramp per row, fig. 3).

Regarding claim 36: Ohta teaches wherein configuring the test pattern to include as many elements as will fit per row comprises: configuring each element using a single color; and confining each single color element to a single row (fig. 3).

Regarding claim 38: Ichikawa teaches configuring the test pattern to maximized the width of the text pattern and minimize height of the test pattern (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size, thereby minimizing paper expenditure by scaling the test pattern to fit the size of each paper. It will not print the pattern on extra sheets because the pattern is scaled to fit the page).

Such teaching would ensure the test pattern of Ohta would be printed within the print medium as well as reducing space.

Ohta teaches wherein each element comprises a color ramp fully contained on a row of the test pattern (fig. 3).

8. Claims 39-41, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al (US 6,975,418) in view of Ichikawa (US 5,729,555) and Nonaka et al (US 6,070,048).

Regarding claim 39: Ohta teaches a processor implemented method for printing a test pattern (1202, 1203, etc, fig. 3), comprising: means (controller, column 7, lines 40-45, or the controlling device that creates the print signal for the test pattern) for configuring the test pattern to include as many elements as will fit per row (fig. 3, shows that the test pattern is configured to have eight color element to be fit in a row; also see note), wherein the configuration moves an element which will not fit on a first row into a second row wherein the moved element will fit in its entirety (fig. 3); and means (printer 108, column 7, lines 45-50) printing the test pattern on the print medium (1201, fig. 3).

Ohta does not teach determining a size of a print medium upon which the test pattern is to be printed.

Ichikawa, in the same area of printing test pattern, teaches determining a size of a print medium upon which the test pattern is to be printed (1102, fig. 11), and change the size of the print element to fit into the print medium.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta to include: means for determining a size of a print medium upon which the test pattern is to be printed and change the size of the print element to fit into the print medium.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta by the teaching of Ichikawa because it would have allowed the printed test pattern matching the paper sized as taught by Ichikawa, column 6, lines 25-30.

Note: Since, mathematically, any number can be divided by any other number no matter how large the other number is (except the other number is 0); theoretically, it is always possible to have any number of elements to fit in a row of print medium. For claim interpretation purpose, "configuring the test pattern to include as many elements as will fit per row" is being interpreted as the test pattern is being configured to have X number of element being fit in a row. If the processor decided to print only cyan element in the first row, cyan is the only color that will be fit into the first row and any other color would be considered as not fit in the first row because the processor would not print the other color in the first row.

Ohta/Ichikawa does not teach the determining print medium size is to measuring a size of the print medium.

However, Nonaka, teaches it is well known in the art that print medium size is determined by measuring the print size (column 1, lines 35-45, column 3, lines 30-35).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta to include: means for measuring a size of the print medium to automatize the system and would have saved the user efforts from entering the paper size manually.

Regarding claim 40: Ichikawa teaches configuring the test pattern to maximized the width of the text pattern and minimize height of the test pattern (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size, thereby minimizing paper expenditure by scaling the test pattern to fit the size of each paper. It will not print the pattern on extra sheets because the pattern is scaled to fit the page).

Such teaching would ensure the test pattern of Ohta would be printed within the print medium as well as reducing space.

Ohta teaches the test pattern comprises a number of color ramps (fig. 3)

Regarding claim 41: Ohta teaches configuring the test pattern to include a second row only when space does not exist on a first row to add an additional element (note, the element of claim 25 can be interpreted as a color ramp; from fig. 3, row 1202 has no space to fit row 1203).

Regarding claim 43: Ichikawa teaches configuring the test pattern to maximized the width of the text pattern and minimize height of the test pattern (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size, thereby minimizing paper expenditure by scaling the test pattern to fit the size of each paper. It will not print the pattern on extra sheets because the pattern is scaled to fit the page).

Such teaching would ensure the test pattern of Ohta would be printed within the print medium as well as reducing space.

Ohta teaches where in each element within the test pattern comprises a color ramps contained on a row of the test pattern (fig. 3).

9. Claims 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al (US 6,975,418) in view of Ichikawa (US 5,729,555) and Nonaka et al (US 6,070,048) as applied to claim 39 and in further view of Kawamura (US 6,72,060).

Ichikawa teaches configuring the test pattern to maximized the width of the text pattern and minimize height of the test pattern (col. 6, lines 30-63, during an adjustment step, the x- and y-coordinates are adjusted to fit the paper size, thereby minimizing paper expenditure by scaling the test pattern to fit the size of each paper. It will not print the pattern on extra sheets because the pattern is scaled to fit the page).

Such teaching would ensure the test pattern of Ohta would be printed within the print medium as well as reducing space.

Ohta does not teach printing on roll media.

Kawamura teaches it is well known in the art to print on rolled media (fig. 18).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Ohta to include printing the test pattern on rolled media such that printer that print on rolled media would be able to be calibrated.

Response to Arguments

10. Applicant's arguments with respect to claims 25-44 have been considered but are moot in view of the new ground(s) of rejection. Please see detailed office action.


Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 13, 2006


**KING Y. POON
PRIMARY EXAMINER**